

Title (en)
A METHOD FOR THE PREPARATION OF 1,2-PROPANEDIOL

Title (de)
VERFAHREN ZUR HERSTELLUNG VON 1,2-PROPANDIOL

Title (fr)
PROCÉDÉ DE PRÉPARATION DE 1,2-PROPANEDIOL

Publication
EP 3988530 B1 20221130 (EN)

Application
EP 20203029 A 20201021

Priority
EP 20203029 A 20201021

Abstract (en)
[origin: EP3988530A1] 1,2-propanediol is prepared by a method comprising step a) of reacting propene with hydrogen peroxide at 50 to 110 °C in the presence of a catalyst mixture comprising a phase transfer catalyst and a polytungstophosphate in a liquid reaction mixture comprising an aqueous phase with a maximum apparent pH of 6 and an organic phase; step b) of separating the reaction mixture into an aqueous phase (P_a) comprising 1,2-propanediol and an organic phase (P_o); step c) of recycling at least part of the separated organic phase (P_o) to step a); step d) of recovering 1,2-propanediol from the aqueous phase (P_a); and step e) of reacting a tungstate with hydrogen peroxide and phosphoric acid at 5 to 40 °C in the presence of the phase transfer catalyst in a liquid mixture comprising an aqueous and an organic phase, followed by passing at least a part of the resulting organic phase comprising the polytungstophosphate and phase transfer catalyst to reaction step a).

IPC 8 full level
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CPC (source: EP KR US)
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C-Set (source: EP)
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